

REMARKS/ARGUMENTS

Claims 1-18 are pending in the present application. By this Amendment, claims 7-18 are canceled, claims 19 and 20 are added, and claims 1 and 2 are amended. Support for the amendments may be found at least on page 19, lines 21-30, page 26, lines 5-10, and page 23, line 21 to page 24, line 18.

Applicants are not conceding that the subject matter encompassed by claims 7-18, prior to this Amendment, is not patentable over the art cited by the Examiner. Claims 7-18 have been canceled solely to facilitate expeditious prosecution of this case. Applicants respectfully reserve the right to pursue the subject matter encompassed by claims 7-18 as presented prior to this Amendment and additional claims in one or more continuing applications. Reconsideration of the remaining claims is respectfully requested.

I. 35 U.S.C. § 101

The Examiner has rejected claims 13-18 under 35 U.S.C. § 101 as being directed towards non-statutory subject matter. This rejection is respectfully traversed.

Claims 13-18 have been canceled.

Accordingly, the rejection of independent claims 13-18 under 35 U.S.C. § 101 has been overcome.

II. 35 U.S.C. § 112, First Paragraph

The Examiner has objected to the claims under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is respectfully traversed.

In rejecting the claims, the Examiner states:

The limitation "set of dependencies" does not appear to be defined within the disclosure. The disclosure refers to dependencies among tables at page 18 line 31 through page 19 line 7; however the cited passages do not appear to describe a set of dependencies or define what is meant by the term. The disclosure does not appear to describe how the set of dependencies are determined? (note: The examiner has interpreted a dependency as relations information as taught by Ishihara et al.)

Office Action dated April 22, 2008, pages 4-5.

The Examiner further states that:

The examiner respectfully maintains the rejection cited under 35 USC 112 first paragraph with respect to the limitation "set of dependencies". Applicant appears to have misinterpreted the rejection. The rejection is based on the written description

requirement. Applicant has not clarified support for the term within the disclosure. Yes, a set of dependencies can refer to a grouping of one or more dependencies; however the disclosure does not make reference or clarify this point. Also, Applicant has not specifically stated how a dependency should be defined. Applicant has not clarified the cited passage at page 18 line 31 through page 19 line 7 cited by the examiner in the rejection (Note this passage talks about a set of information; however the information sets appear to reference a combination of information and not dependency information alone). The scope of a plurality of dependencies is not the same as a set of dependencies or grouping. The term "set of dependencies" as opposed to simply stating dependencies is important in understanding the structure of the invention, and an enabling disclosure.

Office Action dated April 22, 2008, pages 10-11.

Applicants have noted that the term "set of" with reference to the term "dependencies" is a common English phrase that refers to a group or an association of one or more generic entities. Thus, the phrase "a set of dependencies" would be commonly interpreted by anyone as meaning "a plurality of dependencies", "a group of one or more dependencies", or "an association of one or more dependencies". Given that the phrase "set of" is not a technical term and that Applicants have not used the phrase in a manner against common usage, Applicants assert that one having ordinary skill in the art would easily comprehend the phrase "set of" and would apply the common interpretation of the phrase. However, without necessarily agreeing that the Examiner's rejection has merit, Applicants have amended claim 1 to remove the phrase, thus obviating the rejection.

In addition, section 112 requires that an applicant provide an enabling disclosure of his or her invention. Specifically, the disclosure must teach a person of ordinary skill in the art how to make and use the invention without undue experimentation. In the disclosure, however, the applicant need not teach what is well known in the art. *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 U.S.P.Q. 481 (Fed. Cir. 1984); *Staehelin v. Secher*, 24 U.S.P.Q.2d 1513, 1516 (Bd. Pat. App. & Int. 1992). In fact a patent preferably omits what is well known in the art. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 3 U.S.P.Q.2d 1737 (fed. Cir. 1987).

Dependency among tables is described sufficiently to allow one of ordinary skill in the art to implement this particular feature. In reviewing the disclosure, the Examiner has missed pertinent portions, which would provide sufficient information to one of ordinary skill in the art to recreate this claimed feature. These portions include Figure 4 (with the accompanying text on page 12, line 19 to page 14, line 18) which provides an illustrative example of dependencies among tables in a relational database. In Figure 4, three tables are shown, and these tables are linked based on common attributes that are shown as columns in the tables (page 12, lines 25-28). A primary key is known in the art as an attribute that uniquely identifies a record in a table. The primary key of table 410 (AUTH_TABLE) is the author identifier, or AUTHOR_ID, and the primary key of table 430 (BOOK_TABLE) is the ISBN. Table 420

(BOOK_AUTH_TABLE) includes the foreign keys AUTHOR_ID from table 410 and ISBN from table 430, the combination of which comprise the primary key for table 420 (i.e., a combination of the AUTHOR_ID, ISBN pair). As discussed in the specification on page 14, lines 2-3, tables 410, 420, and 430 are linked by way of their primary and foreign keys. Page 14, lines 4-18 go on to further discuss how a table may be dependent on another table. Specifically, page 14, lines 4-7 state that “based on the primary and foreign keys of the tables 410-420-430, the book-author object data in table 420 may not exist independently of the author object data in table 410 or the book object data in table 430.” For example, if an object in table 410 is to be deleted, such as the author “Adams, John”, the book author object data corresponding to “Adams, John” in table 420 must be deleted as well (Specification, page 14, lines 14-18). Thus, the object data in table 420 is dependent on/is subject to the object data in tables 410 and 430.

Similarly, Figure 6D (with the accompanying text on page 25, lines 3-21) of the specification provides another illustrative example of an XML file showing dependencies among tables in the relational database in Figure 4. The XML file includes the table name, listing of primary keys, a dependent table name, foreign keys for the dependent table, and the parent-child relationship between the tables. The dependent table name specifies the table(s) that are dependent on/subject to the defined table.

Applicants also respectfully disagree with the Examiner’s assertion that page 18, line 31 through page 19, line 7 refers to a combination of information and not dependency information alone. The language of the cited passage states that metadata information is retrieved from the source database, and the invention obtains dependency information among the tables from this source database metadata information. An example of the table dependency information obtained from the source database is shown in the XML document in Figure 6D. In the next step of the cited passage, the source database metadata information is used to obtain metadata information about each table in the database (e.g., definitions for each table, the columns in each table, the type definitions of those columns, etc., as described on page 16, lines 29-31). An example of metadata information about a particular table retrieved from the source database is shown in the XML document in Figure 6A. Thus, Figure 6D provides an example of the table dependency information obtained in page 18, line 31 through page 19, line 7, and Figure 6A provides an example of the metadata information about a table in the cited passage as well.

Therefore, the specification and figures do support the limitation “dependencies” in the claims. Applicants assert that the claims adhere to the written description requirements of 35 U.S.C. § 112, first paragraph, because Applicants have reasonably conveyed the claimed invention through the written description to one having ordinary skill in the art.

Therefore, the objection of the specification under 35 U.S.C. § 112, first paragraph has been overcome.

III. 35 U.S.C. § 103, Obviousness

The Examiner has rejected claims 1, 4, 6, 7, 10, 12, 13, 16 and 18 under 35 U.S.C. § 103 as being unpatentable over Ishihara et al., U.S. Patent Number 6,636,876 (hereinafter "*Ishihara*") in view of Ofek et al., U.S. Patent Number 5,680,640 (hereinafter "*Ofek*"). This rejection is respectfully traversed.

In rejecting the claims, the Examiner states:

Regarding claim 1, **Ishihara et al.** teaches a method for migrating data between a first database and second database [note: Abstract "a database copy apparatus, a database copy method, and a recording medium recorded with a database copy program, which increase the generality of a database copying irrespective of the database structure, by partitioning a copy **source database** into predetermined regions, and **copying records and inter-record connection relations** contained in the respective regions to a copy **target database**"; **Figure 7**, copy source database 70 and copy target database 90], the method comprising the steps of:

determining a set of dependencies among a plurality of tables in the first database [note: Figures 1-5; column 7 lines 1-19];

retrieving metadata from the first database, wherein the metadata includes definitions for tables in the first database [note: database extraction section 20 **Figure 7**; column 7 lines 20-60];

reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies [note: column 7 lines 20-60; column 10 lines 58-59 "In step 31, one entry is read from the extraction data file 62"]; and

writing data to a second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined set of dependencies [note: column 7 lines 20-60; column 8 lines 33-40 "writes the extraction data into file storage section 60"; col. 1 line 55 through col. 2 line 17].

Although *Ishihara et al.* teaches the invention substantially as cited above, they do not explicitly disclose a read operation and a write operation. However, *Ishihara et al.* does teach reading data and writing data as part of a copy technique. **Ofek et al.** teaches a *read operation* or a *write operation* as part of a data read request and/or data write request when migrating data from a first storage device to a second storage device [see: column 2 lines 39-48]. It would have been obvious to one of ordinary skill at the time of the invention to have combined *Ofek et al.* with *Ishihara et al.* because a read operation and a write operation would allow *Ishihara et al.*'s system to read and write data to a storage medium.

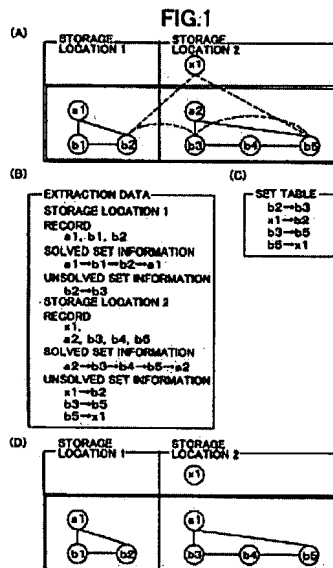
Office Action dated April 22, 2008, pages 6-8.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). For an invention to be *prima facie* obvious, the prior art must teach or suggest all claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Independent claim 1 of the present invention reads as follows:

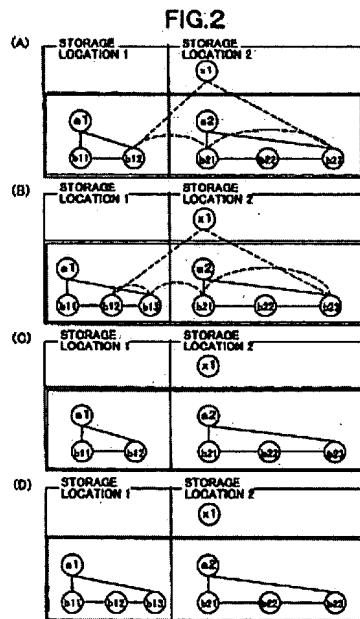
1. A method for migrating data between a first database and a second database, the method comprising the steps of:

determining dependencies among a plurality of tables in the first database;
retrieving metadata from the first database, wherein the metadata includes definitions for tables in the first database;
reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies; and
writing data to the second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined dependencies.

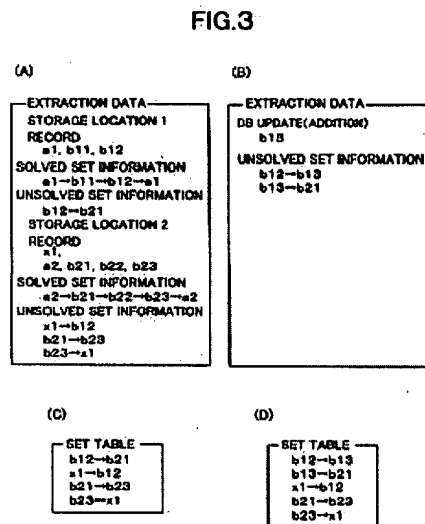
Neither *Ishihara* nor *Ofek* teach or suggest the feature of determining dependencies among a plurality of tables in the first database. The Examiner alleges that this feature is found in the following cited sections of *Ishihara* below:



Ishihara, Figure 1.

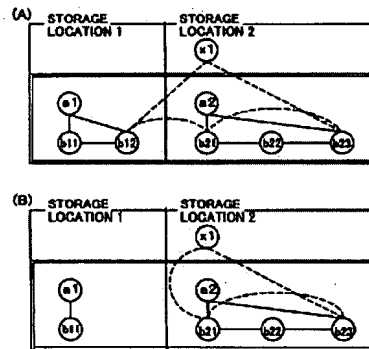


Ishihara, Figure 2.



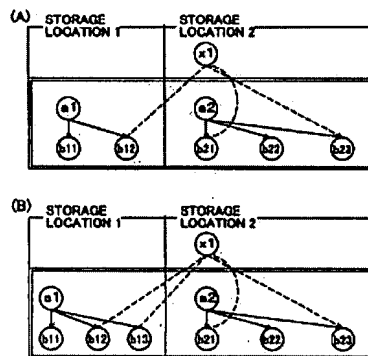
Ishihara, Figure 3

FIG.4



Ishihara, Figure 4.

FIG.5



Ishihara, Figure 5.

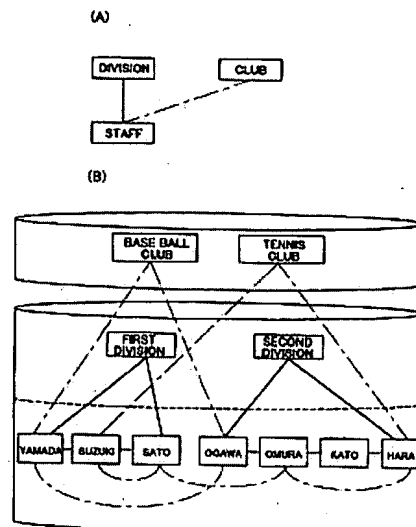
FIG. 1 illustrates a DB copy method for the case where there is no DB updating during DB copying.

In the case where the copy source DB is a data storage structure such as shown in FIG. 1, section (A), extraction data such as shown in FIG. 1, section (B) is extracted from the copy source DB. The extraction data comprises records, solved set information and unsolved set information for each respective storage location. The records are a data body stored in the copy source DB, such as "base ball club", "first division", "Yamada", if the copy source DB is a data structure as shown in FIG. 22. The solved set information is information specifying the set relations which cannot have set relations extending between different storage locations. The unsolved set information is information specifying the set relations which can have set relations extending between different storage locations. If the extraction data can be extracted, then a set table (to be described in detail later) as shown in FIG. 1, section (C) is generated from the unsolved set information.

Ishihara, column 7, lines 1-19.

Figures 1-5 provide illustrative examples of data structures and the *Ishihara* data copying method in which there is no database updating during copying, and in which there is database updating (addition and deletion) during copying. Column 7, lines 1-19 provides the accompanying text to Figure 1. In column 7, lines 1-19, *Ishihara* discloses a method for copying data from one database to another. In copying data between databases, the *Ishihara* process partitions a copy source database into multiple regions (*Ishihara*, col. 2, lines 1-2) and copies the records and inter-record connection relations (solved set information and unsolved set information) contained in the respective regions to a copy target database. The inter-record connection relations for the different regions are extracted and duplicated on the copy target database.

While *Ishihara* teaches copying data from one database to another, *Ishihara* does not teach or suggest determining dependencies among tables in source database. As discussed in section II above, a table is dependent upon another table if the dependent table cannot exist independently of the other parent table. In contrast to determining table dependencies, *Ishihara* teaches using inter-record connection relations, or set relations. A set relation in *Ishihara* is a connection relationship between records in a database (*Ishihara*, col. 1, lines 42-44). Figure 22 of *Ishihara*, shown below, provides a visual example of these relationships among data in a database.



Ishihara, Figure 22.

In Figure 22, various connection relations between records are shown (e.g., related objects “Baseball Club”, “Yamada”, and “Ogawa”). However, each of these records may exist independently of the other records. If any of the records were removed from the database, all of the other records would

continue to exist in the database, even though the records may no longer have any connection relations to another object. An inter-record connection relation in *Ishihara* merely describes two or more records that are being of the same or similar kind, rather than specifying that a record cannot exist without another record. Thus, while *Ishihara* discloses that connection relations among records may be duplicated to the copy target database, there is no teaching or suggestion in *Ishihara* of determining if the records are actually dependent on one another. Consequently, *Ishihara* does not teach or suggest determining dependencies among a plurality of tables in the first database.

Ishihara and *Ofek* also do not teach or suggest the feature of reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies as recited in claim 1 of the present invention. The Examiner alleges that this feature is found in the following cited sections of *Ishihara* below:

The records are copied to the copy target DB, and as shown in FIG. 1, section (D) the inter-record set relations copied based on the solved set information are duplicated. After this, when the unsolved set relations are duplicated based on the set table, a database structure having the same logic construction as in FIG. 1, section (A) is duplicated on the copy target DB.

Furthermore, in the case where there is DB updating during DB copying, then there is the DB copy method as shown in FIG. 2 and FIG. 3.

In the case where the copy source DB is a data storage structure as shown in FIG. 2, section (A), then as with the previous example, the extraction data as shown in FIG. 3, section (A) is extracted from the copy source DB. Here the case is considered for where as shown in FIG. 2, section (B), after extracting the data from the storage location 1 of the copy source DB and prior to data extraction from the storage location 2, record "b13" is added to the storage location 1. In this case, an update difference such as shown in FIG. 3, section (B) is acquired. The update difference comprises both the DB update information and the unsolved set information. Furthermore, the set table as shown in FIG. 3, section (C) is generated based on the unsolved set information.

Then, as with the previous example, the records are copied to the copy target DB, and as shown in FIG. 2, section (C) the inter-record set relations which have been copied based on the solved set information, are duplicated.

Incidentally, since the record "b13" is added to the storage location 1, then this must be reflected in the copy target DB. That is, when updating is performed for the copy target DB based on the DB update information for the update difference, then this becomes as in FIG. 2, section (D). Moreover, since the requirement arises for also modifying the set table with the DB updating, then when the set table is updated based on the unsolved set information for the update difference, the set table becomes as in FIG. 3, section (D). After this, when the unsolved set relations are duplicated based on the set table, a DB structure having the same logic structure of FIG. 2, section (A) is duplicated on the copy target DB.

Ishihara, column 7, lines 20-60.

In step 31, one entry is read from the extraction data file 62.

Ishihara, column 10, lines 58-59.

Column 7, lines 20-60 of *Ishihara* provides the accompanying text to Figures 1 and 2. This cited section discloses the *Ishihara* process of extracting from the copy source database “extraction data” (comprising records, solved set relations, and unsolved set relations for each database region), registering any unsolved set relations in a set table (*Ishihara*, Figure 11), duplicating the solved set relations, duplicating the unsolved set relations based on the set table, and copying the records and inter-record connection relations contained in the respective regions of the copy source database to the copy target database. The cited section also discloses that database update requests may be processed during database copying by acquiring an update difference due to the update request, and updating the records and inter-record connection relations copied to the copy target database based on this update difference.

Column 10, lines 58-59 of *Ishihara* discloses the first part of the process for registering the unsolved inter-record connection relations in the set table. The cited section discloses reading one entry from the extraction data file to begin the registering process. The extraction data file comprises the records, solved inter-record connection relations, and unsolved inter-record connection relations for each database region.

Ishihara does not teach or suggest performing read operations in an order indicated by determined table dependencies. As *Ishihara* merely discloses extracting connection relationship information among records in a database rather than determining the dependencies among tables in a database as in the presently claimed invention, *Ishihara* cannot teach or suggest performing a read operation based on such determined dependencies.

Furthermore, *Ishihara* makes no mention of performing a read operation in a particular order. Although *Ishihara* discloses that one entry may be read from the extraction data file at a time (*Ishihara*, column 10, lines 58-59), *Ishihara* fails to teach that the entries in the extraction data file are read in any particular order. *Ishihara* merely teaches reading one entry from the extraction file, without specifying that any particular entries should be read before or after other entries, nor does *Ishihara* mention any motivation to do so. *Ishihara* is not concerned with reading files in any particular order, as *Ishihara* is concerned with generating a set table which comprises the registered unsolved set relations for the data migration. Consequently, *Ishihara* does not teach or suggest reading data from tables in the first database using a plurality of read operations, wherein the read operations are structured in accordance with the retrieved metadata, and wherein the read operations are in an order indicated by the determined dependencies as recited in claim 1 of the present invention.

Ishihara and *Ofek* further do not teach or suggest the feature of writing data to the second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined dependencies as recited in claim 1 of the present invention. The Examiner alleges that this

feature is found in *Ishihara* in column 7, lines 20-60 and in the following cited sections of *Ishihara* below:

The DB extraction section 20 extracts extraction data from a copy source DB 70 in accordance with the flow chart shown in FIG. 8, and writes the extraction data into the file storage section 60 as an extraction data file 62. Here the DB extraction section 20 acts as part of; a data copying device, a data copying step, a data copying function, a connection relations extraction device, a connection relations extraction step, and a connection relations extraction function.

Ishihara, column 8, lines 33-40.

The present invention takes into consideration the heretofore problems, with the object of providing a database copying technique with increased generality, which efficiently performs DB copying irrespective of the DB structure.

Furthermore, it is an object to distribute a recording medium recorded with a database copying program according to the present invention, so that a person acquiring the recording medium can easily construct a database copy apparatus.

For achieving the above objects, a first solution device is characterized in that a database copy apparatus comprises: a data copying device for partitioning a copy source database into predetermined regions, and copying records and inter-record connection relations contained in the respective regions to a copy target database; a connection relations extraction device for extracting from the copy source database the inter-record connection relations respectively contained in different regions; and a connection relations duplication device for duplicating the inter-record connection relations copied to the copy target database by the data copying device, based on the connection relations extracted by the connection relations extraction device.

With such a construction, copying of the database is performed as follows. (1) The copy source database is partitioned into predetermined regions, and the records and the inter-record connection relations contained in the respective regions are copied to the copy target database.

Ishihara, column 1, line 55 to column 2, line 17.

As stated above, column 7, lines 20-60 of *Ishihara* provides the accompanying text to Figures 1 and 2 which discloses the *Ishihara* process of extracting from the copy source database extraction data, registering any unsolved set relations in a set table, duplicating the solved set relations, duplicating the unsolved set relations based on the set table, and copying the records and inter-record connection relations contained in the respective regions of the copy source database to the copy target database. Column 8, lines 33-40 disclose a database extraction component that performs the extraction of data from the copy source database and writes the extracted data to storage as an extraction data file. The database extraction component acts as part of a data copying device and a connection relations extraction device. Column 1, line 55 to column 2, line 17 discloses a summary of the invention for providing a database copy apparatus comprising a data copying device for partitioning a source database in predetermined regions and copying records and connection relations in the regions to a target database, a connections relations extraction

device for extracting from the source database inter-record connection relations for the regions, and a connection relations duplication device for duplicating the relations to the target database.

Ishihara does not teach or suggest performing write operations in an order indicated by determined table dependencies. *Ishihara* only discloses extracting connection relationship information among records in a database. *Ishihara* does not mention dependencies among tables in a database, and thus cannot teach or suggest performing a write operation based on such determined dependencies.

Furthermore, *Ishihara* makes no mention of performing a write operation in a particular order. *Ishihara* merely teaches writing data that was extracted from the source database into an extraction data file to a storage location. However, *Ishihara* does not mention anything about writing the extracted data in any order, nor does *Ishihara* mention anything about writing data in an order based on dependencies of tables in the source database. *Ishihara* does not specify that any particular entries should be written before or after other entries, but rather merely teaches generally that data is extracted and written to an extraction file. Consequently, *Ishihara* does not teach or suggest writing data to the second database using a plurality of write operations, wherein the write operations are in an order indicated by the determined dependencies as recited in claim 1 of the present invention.

Claims 7, 10, 12, 13, 16 and 18 are canceled.

Claims 4, 6, 19, and 20 depend from claim 1 and are also not obvious over *Ishihara* in view of *Ofek*, at least by virtue of their dependency from claim 1. In addition, these dependent claims comprise additional features not taught or suggested by the combination of *Ishihara* and *Ofek*. For example, claim 19 recites wherein the write operations are in an order indicated by the determined dependencies to ensure referential integrity in the second database. *Ishihara* is not concerned with referential integrity, nor with ensuring referential integrity is maintained in a target database. *Ishihara* does not mention that writing of the extraction file is performed in an order based on the table dependencies to ensure referential integrity of the target database. In addition, claim 20 recites wherein the predetermined modification operation comprises assigning a default value to a field in a table in the second database that does not have a corresponding field in a corresponding table in the first database. *Ishihara* also fails to teach or suggest a modification operation that comprises assigning a default value to a table field in the target database that does not have corresponding table field in the source database. *Ishihara* merely teaches that when data is added to a region of the database after the region has been migrated to the target database, *Ishihara* allows the target database to be updated with the new data and record connections. There is no teaching in *Ishihara* that its modification operation comprises assigning a default value to a table field in the target database that does not have corresponding table field in the source database.

Therefore, the rejection of claims 1, 4, 6, 7, 10, 12, 13, 16 and 18 under 35 U.S.C. § 103 has been overcome.

IV. 35 U.S.C. § 103, Obviousness

The Examiner has rejected claims 2, 3, 5, 8, 9, 11, 14, 15 and 17 under 35 U.S.C. § 103 as being unpatentable over Ishihara et al., U.S. Patent Number 6,636,876, (hereinafter "*Ishihara*"), in view of Ofek et al., U.S. Patent Number 5,680,640 (hereinafter "*Ofek*") and Underwood, U.S. Patent Number 6,633,878 (hereinafter "*Underwood*"). This rejection is respectfully traversed.

In rejecting the claims, the Examiner states:

Ishihara et al. and Ofek et al. teach the invention substantially as applied to independent claims 1, 7, and 13 above; however they do not explicitly teach use of a markup language. Regarding claims 2, 8 and 14 Ishihara et al. teach storing the determined dependencies to identify table dependencies [see: column 8 lines 35-40 "writes the extraction data into the file storage section 60"]; however they do not explicitly state that it is done using markup language. **Underwood** teaches a conventional architecture such as a client/server system that communicates using an HTTP protocol and the data is transmitted typically in the format of a standard hypertext markup language [see: column 1 lines 46-60 standard hypertext markup language (HTML) format]. It would have been obvious to one of ordinary skill at the time of the invention to have combined Underwood with the cited references since HTML format is a well know standard format, and also provides compatibility among both similar and different platforms when transmitting data.

Regarding claims 3, 9 and 15, "storing the retrieved metadata" [note: Ishihara et al. "writes the extraction data into the file storage section 60" column 8 lines 35-40].

Regarding claims 5, 11, and 17, "storing the predetermined modification operation" [note: Ishihara et al. column 7 lines 30-60 "after extracting the data from the storage location 1 of the copy source database DB and prior to data extraction from the storage location 2, record "b313" is added to the storage location 1. In this case, an update difference such as shown in FIG. 3, section (B) is acquired"].

Office Action dated April 22, 2008, pages 8-9.

Claims 8, 9, 11, 14, 15 and 17 are canceled.

Claims 2, 3, and 5 are dependent claims depending on independent claim 1. The *Ishihara* reference as relied on by the Examiner still does not teach or suggest all the claim limitations in dependent claims 2, 3, and 5, as explained in the response to the rejection of independent claim 1 in section III above. Consequently, a combination of *Ishihara*, *Ofek*, and *Underwood* still would not reach the presently claimed invention in claims 2, 3, and 5.

In view of the above, Applicants submit that dependent claims 2, 3, and 5 are not taught or suggested by the combination of *Ishihara*, *Ofek*, and *Underwood*. Applicants have already demonstrated claim 1 to be in condition for allowance. Applicants respectfully submit that claims 2, 3, and 5 are also allowable, at least by virtue of their dependency on allowable claims.

Therefore, the rejection of claims 2, 3, 5, 8, 9, 11, 14, 15 and 17 under 35 U.S.C. § 103 has been overcome.

V. Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: September 16, 2008

Respectfully submitted,

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